Permit No. 2018-74 Received complete: July 3, 2018

Applicant: Parham Javaheri; Life Time Athletic

Consultant: Laura Clarens; Kimley-Horn and Associates, Inc.

Project: Bloomington Senior Housing

Location: 6701 West 78th Street: Bloomington

Rule(s): 2,3,4,5,11,12

Reviewer: BCO

General Background & Comments

The project proposes the construction of a 4-story, 270,930 sq. ft. senior living facility that includes a senior Day Care component. The site is the former Northwest Fitness Center that was razed in 2006.

Nine Mile Creek runs diagonally through the west – southwest corner of the site. The creek's 100-year Atlas 14 flood elevation on the site is 820.5 M.S.L. No fill, encroachment or alteration within the floodplain, below 820.5 M.S.L., is proposed.

There are two wetland areas on the site as identified and delineated by the permit applicant's wetland consultant. The City of Bloomington is the LGU administering the requirements of the Wetland Conservation Act. The first wetland located along the creek has been identified as a medium value wetland requiring a minimum 20 foot and 40 foot average buffer in accordance with section 3.4.1b of the District rules. The second wetland, located near the southern boundary of the property, was determined to be incidental with a Notice of Decision issued by the City in December, 2014. (WCA exemption decisions are valid for three tears. Min. R. 8420.0255, subp. 4. But the City, being the LGU, determines that the fundamental characteristics of the southern wetland that were the basis for the determination that is incidental have not changed. We concur with this determination.) The District's buffer requirements are not applicable to an incidental wetland, Rule 3.2.2a.

The project site information is:

- Total Site Area: 7.08 acres (308,405 square feet)
- Existing Total Site Impervious Area: 0.15 acres (6,534 square feet
- New Total Site Impervious Area: 3.31 acres (144,184 square feet)
- Increase in the site impervious area: 137,650 square feet

- Greater than a 100% increase in the Site Impervious Area
- Total Area to be Disturbed: 4.58 acres (199,505 square feet)

The Nine Mile Creek Watershed District's Rule for Redevelopment, Rule 4.2.3, states, if a proposed activity will disturb more than 50% of the existing impervious surface on a parcel or will increase the imperviousness of the parcel by more than 50%, storm water management will apply to the entire project parcel. Otherwise, the storm water requirements will apply only to the disturbed areas and additional impervious area on the parcel. Since the increase in the on-site impervious area is greater than 100%, storm water management is required for the 199,505 square feet of disturbed area that includes 144,184 square feet of new impervious area.

The District's requirements for both storm water management and erosion and sediment control apply to the project because more than 50 cubic yards of material will be disturbed and 5000 square feet or more surface area disturbed, Rules 4.2.1a and b and 5.2.1a and b.

Storm water management is to be provided within three systems; an underground storm water management facility (UGSWMF), 64 lineal feet of perforated 48-inch HDPE storm sewer and 169 lineal feet of perforated 36-inch HDPE storm sewer that will provide volume retention, rate control and water quality management.

Silt fence is to be constructed at the limits of construction, inlet protection and a rock construction entrance will be provided for erosion control.

Exhibits

- 1. Permit Application dated June 19, 2018.
- 2. Plans dated June 15, 2018 prepared by Kimley-Horn and Associates.
- 3. Storm Water Management calculations dated May 23, 2018 and revised June 26, 2018, prepared by Kimley-Horn and Associates
- 4. Geotechnical Report dated March 21, 2018 prepared by Braun Intertec.
- 5. E-mail correspondence from Barr Engineering dated May 15, 2018 agreeing with the medium value wetland identification for the wetland area along the creek.
- 6. Notice of Decision issue by the City of Bloomington dated October 16, 2014 identifying the wetland along the southern boundary of the site as an incidental wetland.
- 7. E-mail correspondence dated July 2, 2018 outlining 3 items requiring information for the submittal to be considered complete by the District.
- July 3, 2018 response to the District's e-mail of July 2nd.

The submittal is complete.

2.0 Floodplain Management and Drainage Alterations

As previously stated, no work, alteration, or filling of the land below elevation 820.5 M.S.L., the 100-year frequency flood elevation of Nine Mile Creek on the site, is proposed and there are no existing stormwater management facilities on the site. The low floor elevation of the proposed building is 828.5 M.S.L., 8.0 feet above the flood elevation of the creek. Rule 2.3.1 states that all new and reconstructed structures must constructed in accordance with

subsection 4.3.3 of the District rules which requires a minimum separation of at least two feet above the 100-year high water elevation of any open stormwater conveyance, Rule 4.3.3b. The District's low floor requirement is met.

Rule 2.3.4 states that no structure may be placed within 50 feet of the centerline of any water course. The closes point between the centerline of the creek and the edge (curb line) of a proposed driveway is 80 feet.

3.0 Wetlands Management

As previously stated, there are two wetland areas on the site as identified and delineated by the permit applicant's wetland consultant. The City of Bloomington is the LGU administering the requirements of the Wetland Conservation Act. The first wetland located along the creek has been identified as a medium value wetland requiring a minimum 20 foot and 40 foot average buffer in accordance with section 3.4.1b of the District rules. The second wetland, located near the southern boundary of the property, was determined to be incidental with a Notice of Decision issued by the City in December, 2014. The District's buffer requirements are not applicable to an incidental wetland, Rule 3.2.2a.

The plans show that the buffer for the wetland along the creek will be taken to the top of the slope, where the slope is averaging 12 percent or greater, or the 40 feet, whichever is greater. The minimum 20 foot width is also provided.

4.0 Stormwater Management

Storm water management is to be provided within three systems; an UGSWMF, 64 lineal feet of perforated 48-inch HDPE storm sewer and 169 lineal feet of perforated 36-inch HDPE storm sewer that will provide volume retention, rate control and water quality

The existing and proposed 2, 10 and 100 year frequency discharges from the site are:

| Frequency | Existing Discharge to West 78 th Street c.f.s. | Proposed Discharge to West 78 th Street c.f.s. |
|-----------|---|---|
| 2 year | <1.0 | <1.0 |
| 10 year | <1.0 | <1.0 |
| 100 year | <1.0 | <1.0 |

| Frequency | Existing Discharge to the South c.f.s. | Proposed Discharge to the South c.f.s. |
|-----------|--|--|
| 2 year | 5.0 | 4.0 |
| 10 year | 12.0 | 8.5 |
| 100 year | 31.9 | 19.8 |

An infiltration volume of 13,217 cubic feet is required from the 144,184 square feet of impervious area. The infiltration rates vary from 0.2 inches/hour in the area of the 48- inch HDPE to 0.45 inches/hour in the area of the 36-inch HDPE to 0.8 inches/hour in the area of the UGSWMF. At the varying depths required for the systems to drawdown in 48 hours (4.3.1a (ii)) the combined systems will provide a volume of 14, 358 cubic feet (13,217 cubic feet required) and 6,481 square feet of area. Rule 4.3.1a is met.

The District's water quality criterion requires a 60% annual removal efficiency for phosphorus and 90% annual removal efficiency for total suspended solids. The results of the MIDS calculator show that the three stormwater facilities will provide an annual removal efficiency of 90% for total suspended solids (1,026 lbs.) and an annual removal efficiency of 64% for total phosphorus (3.97 lbs.). Rule 4.3.1c is met.

Rule 4.3.2 a states, all structures riparian to inundation areas or constructed or natural storm water management facilities must be located and elevations must be set according to Appendix 4a, "Suggested Low Floor Guidance." Referring to Plot 5, Appendix 4A of the District Rules, as shown in the table below, the elevation difference between the low floor elevation of the building and groundwater is greater than the required minimum depth to groundwater therefore Rule 4.3.2 is met.

| | Groundwater Elevation (MSL) | Low Floor Elevation (MSL) | Elev. Difference (Feet) | Distance from Building (Feet) | Minimum depth to groundwater (Feet) |
|-----------------|-----------------------------------|---------------------------------|-------------------------------|-------------------------------------|--|
| 36-inch HDPE | 821 | 828.5 | 7.5 | 27 | 3 |
| 48-inch HDPE | 817.8 | 828.5 | 10.7 | 9 | 3.5 |
| UGSWMF | 817.9 | 828.5 | 10.6 | 30 | 2.7 |

In accordance with Rule 4.3.1a (i), the pre-treatment of runoff prior to reaching the section of 48-inch HDPE perforated pipe and UGSWMF used for infiltration will be provided by sump manholes within the system. Pre-treatment is required upstream of the 36-inch HDPE perforated pipe (e.g. a sump in M.H. #105).

Rule 4.5.4d (i), requires a minimum separation of 3 feet between the bottom of an infiltration facility, practice or system. The following table provides a comparison of groundwater observed in the borings taken and the bottom of the proposed infiltration facility.

| ВМР | Bottom Elevation (M.S.L.) | Groundwater Elevation (M.S.L.) | Separation (feet) |
|--------------|---------------------------|-----------------------------------|-------------------|
| 36-inch HDPE | 826 | 821 | 5 |
| 48-inch HDPE | 821.5 | 817.8 | 3.7 |

| UGSWMF | 830.3 | 817.9 | 12.4 |
|--------|-------|-------|------|
| | | I | |

Rule 4.5.4d (i) is met.

In accordance with Rule 4.3.4, a post-project chloride management plan must be provided that will, 1) designate an individual authorized to implement the chloride-use plan and 2) designate a MPCA certified salt applicator engaged in the implementation of the chloride-use plan for the site.

5.0 Erosion and Sediment Control

The submitted erosion and sediment control plan includes silt fence at the limits of construction, inlet control and a gravel construction entrance. The project contact is Laura Clarens, Kimley-Horn, and Associates.

11.0 Fees

Fees for the project are:

Rules 2.0-6.0 \$1,500

12.0 Financial Assurances

Financial Assurances for the project are:

Rule 4.0 Volume Retention: 6,481 sq. ft. x \$12/sq. ft. = \$77,772 \$77,772

Chloride Management: \$5000

Rule 5: Silt fence: 340 L.F. x \$2.50/L.F.= \$850

Inlet Protection: 9 x \$100/each = \$900

Site restoration: 4.6 acres x \$2500/acre = \$11,500 \$13,250

Contingency and Administration \$39,178

Findings

The proposed project includes the information necessary, plan sheets and erosion control plan, for review.

1. Rules 4 and 5 are met.

Recommendation

Approval, contingent upon:

- 1. General Conditions
- 2. Financial Assurance in the amount of \$135,200 \$130,200 for stormwater management, erosion control and site restoration and \$5,000 for compliance with the chloride management requirements.
- 3. Submission of documentation that a drainage easement over the stormwater-management facilities has been submitted to Bloomington (4.5.4i), if such easement is required by the city, and a receipt showing recordation of a maintenance declaration for the on-site storm water management facilities and wetland buffer area. A draft of the declaration must be approved by the District prior to recordation.

4. The plans must be revised to include pre-treatment of stormwater upstream of the proposed 36-inch perforated HDPE being used for infiltration (e.g. a sump in M.H. 105).

By accepting the permit, when issued, the applicant agrees to the following stipulations:

- 1. Per Rule 4.5.6, an as-built drawing of the storm water facilities conforming to the design specifications as approved by the District must be submitted.
- 2. Buffer markers, in accordance with the requirements of District Rule 3.4.5, must be installed.
- 3. Submission of a plan for post-project management of Chloride use on the site. The plan must include 1) the designation of an individual authorized to implement the chloride use plan and 2) the designation of a Minnesota Pollution Control Agency certified salt applicator engaged in the implementation of the chloride-use plan for the site. The release of the \$5,000 of the financial assurance required for the chloride-management plan requires that chloride-management plan has been provided and approved by the District's Administrator.
- 4. For the release of the \$130,200 financial assurance required in Recommendation #2, Rule 12.4.1b requires demonstration and confirmation that the storm water management facilities have been constructed or installed and are functioning as designed and permitted. Verification, through daily observation logs and photographs, must be provided showing the storm water facilities used for volume retention have drawn down within 48 hours from the completion of two 1-inch (approximate) separate rainfall events.

| Board Action | | |
|------------------------------------|--|------------|
| It was moved by Manager | , seconded by Manager | to approve |
| permit application No. 2018-74 wit | h the conditions recommended by staff. | |

Permit #: 2018-74

Project Name: Bloomington Senior Housing – 6701 West 78th Street: Bloomington

Approval Date: July 18, 2018

General Provisions

1. All temporary erosion control measures shown on the erosion and sedimentation control plans must be installed prior to commencement of surface or vegetation alteration and be maintained until completion of construction and vegetation is established as determined by NMCWD.

If silt fence is used, the bottom flap must be buried and the maximum allowable spacing between posts is 4-foot on center. All posts must be either 2-inch x 2-inch pine, hardwood, or steel fence posts. If hay bales are used, all bales must be staked in place and reinforced on the downstream side with snow fence.

- 2. All areas altered because of construction must be restored with seed and disced mulch, sod, wood fiber blanket, or be hard surfaced within two weeks after completion of land alteration and no later than the end of the permit period.
- 3. Upon final stabilization, the permit applicant is responsible for the removal of all erosion control measures installed throughout the project site.
- 4. At the entryway onto the site, a rock filter dike being a minimum of two feet in height and having maximum side slopes of 4:1 must be constructed. This rock filter dike will enable construction traffic to enter the site and also provide an erosion control facility.
- 5. If dewatering is required and sump pumps are used, all pumped water must be discharged through an erosion control facility prior to leaving the construction site. Proper energy dissipation must be provided at the outlet of the pump system.
- 6. The NMCWD must be notified a minimum of 48 hours prior to commencement of construction.
- 7. The NMCWD, its officers, employees and agents review, comment upon, and approve plans and specifications prepared by permit applicants and their consultants for the limited administrative purpose of determining whether there is reasonable assurance that the proposed project will comply with the regulations and criteria of the NMCWD. The determination of the NMCWD that issuance of this permit is appropriate was made in reliance on the information provided by the applicant.
- 8. The grant of this permit shall not in any way relieve the permittee, its engineer, or other professional consultants of responsibility, nor shall it make the NMCWD responsible for the technical adequacy of the engineer's or consultant's work. The grant of this permit shall not relieve the permittee from complying with all conditions and requirements of the permit which shall be retained by the permittee with the permit.
- 9. The issue of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.
- 10. This permit is permissive only. No liability shall be imposed upon the NMCWD or any of its officers, agents or employees, officially or personally, on account of the granting of this permit or on account of any damage to any person or property resulting from any act or omission of the permittee or any of its agents, employees, or contractors.

- 11. In all cases where the doing by the permittee of anything authorized by this permit shall involve the taking, using, or damaging of any property, rights or interests of any other person or persons, or of any publicly-owned lands or improvements or interests, the permittee, before proceeding therewith, shall obtain the written consent of all persons, agencies, or authorities concerned, and shall acquire all necessary property, rights, and interest.
- 12. The permit is transferable only with the approval of the NMCWD (see NMCWD Rule 1.0). The permittee shall make no changes, without written permission previously obtained from the NMCWD, in the dimensions, capacity, or location of any items of work authorized by this permit.
- 13. The permittee shall grant access to the site at all reasonable times during and after construction to authorized representatives of the NMCWD for inspection of the work authorized by this permit.
- 14. This permit may be terminated by the NMCWD at any time deemed necessary in the interest of public health and welfare, or for violation of any of the provisions of this permit.
- 15. Construction work authorized under this permit shall be completed on or before date specified above. The permittee may, in writing, request that the NMCWD extend the time to complete the project in accordance with NMCWD Rule 1.0.



Permit No.2018-74

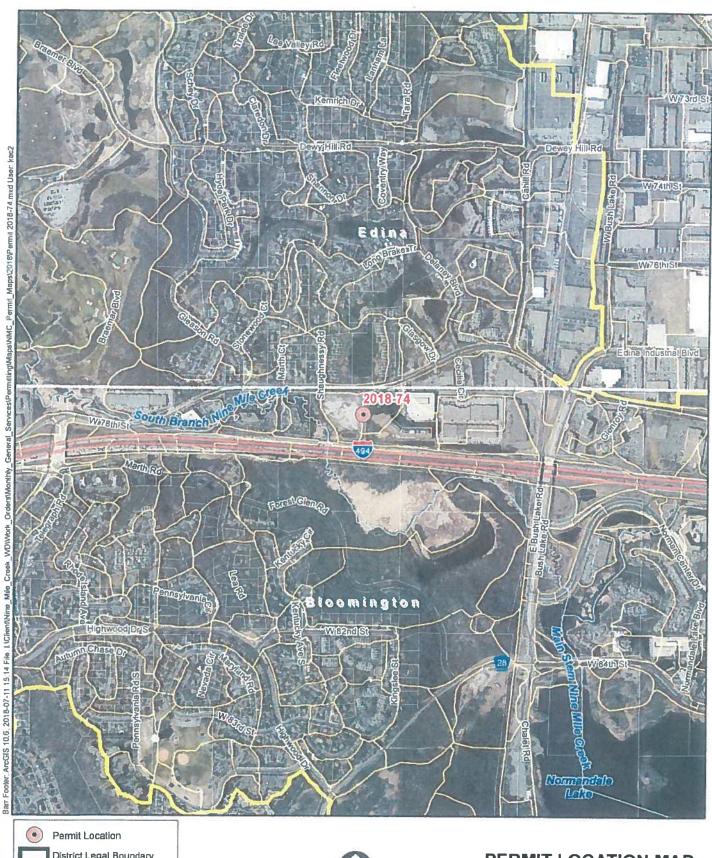
Is hereby issued to Parham Javaheri, Executive Vice President of Real Estate and Development – Life Time Athletic, subject to the conditions specified in the attached form:

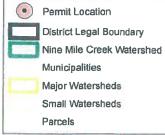
For the Bloomington Senior Housing facility to be located at 6701 West 78th Street in Bloomington.

Steve Kloiber

Chair, Board of Managers

This permit expires on: August 1, 2019







PERMIT LOCATION MAP PERMIT 2018-74 Nine Mile Creek Watershed District